

REMARKS

Claims 1 - 4, 7 - 26, and 29 - 43 together with new dependent claims 44-47 are now pending. Claims 5-6 and 27-28 have been previously cancelled without prejudice. New dependent claims 44-45 ultimately depend from independent base claim 1. New dependent claims 46-47 ultimately depend from independent base claim 39.

Claims 1, 2, 14, 39 and 40 have been amended and new claims 44-47 have been added without introducing new matter as noted in further detail below.

Amendments Made to Claims 1, 2, 14, 39 and 40 & New Claims 44-47

Claims 1, 2, 14, 39 and 40 have been amended to improve clarity, to recite proper claim format and/or to recite correct grammatical English usage. New dependent claims 44-47 are directed to certain embodiments.

Regarding claim 1, it has been amended for improved clarity. In particular, the term "attached" is replaced with the term "one or more affixed" with respect to the single or multiple "formations" of the "rotatable locking pin". (Emphasis added.) Likewise for improved clarity, claim 1 has been further amended to replace the term "attached" with the term "one or more affixed" with respect to the single or multiple "engaging formations" of the "retaining element". (Emphasis added.) See the Listing of the Claims section of this paper at page 2 hereof.

Regarding claim 2, the term "components" is inserted in the penultimate line (i.e., second to last line of claim 2) after "first and second" to correct a typographical omission and/or to improve clarity with respect to "first and second". (Emphasis added.) See the Listing of the Claims section of this paper at page 2 hereof.

Regarding allowed claim 14, Applicants note that claim 14 has been amended to delete an extraneous period appearing in the middle of the claim. In its place, a comma is inserted (i.e., substitute "," for ".") to correct an obvious typographical error so as to conform to proper claim format (i.e., such that only a single period is recited at the end of each claim). See the Listing of the Claims section of this paper at pages 3-4 hereof.

Claim 39 is amended to improve clarity by reciting "one or more affixed" in place of "attached" with respect to the single or multiple "engaging formations" of the "retaining element". (Emphasis added.) Claim 39 is further amended to recite "one or more affixed engaging formations" as needed to reflect proper claim formatting (satisfy antecedent basis). (Emphasis added.) See the Listing of the Claims section of this paper at page 8 hereof.

Claim 40 is amended to improve clarity by reciting the language "the pin prevents said relative movement of the components in said opposite disengagement directions" by inserting the underlined terms noted. (Emphasis added.) See the Listing of the Claims section of this paper at page 8 hereof.

Dependent claim 44 recites that the "affixed formations" are "affixed" to the "rotatable locking pin" at a "corresponding set of first fixed locations". (Emphasis added.) Likewise, claim 44 recites that

the “affixed engaging formations” are “affixed” to the “retaining element” at a “corresponding set of second fixed locations”. (Emphasis added.) Additionally, claim 44 recites that the “first fixed locations” (e.g., of (or possibly on) the rotatable locking pin) and the “second fixed locations” (e.g., of (or possibly on) the retaining element) “are the same” respective locations thereof (e.g., respectively of (or possibly on) the locking pin, and; respectively of (or possibly on) the retaining element) regardless of whether the locking pin and/or the retaining element is/are in the locked position or in the free position. (Emphasis added.) See the Listing of the Claims section of this paper at pages 8-9 hereof. Thus, the respective “fixed” locations of the locking pin (first fixed locations for the “one or more affixed formations”) are the same locations of the locking pin between its “free” position and its “locked” position. Independently, the respective “fixed” locations of the retaining element (e.g., second fixed locations for the “one or more affixed engaging formations” – claim 1, and; fixed locations for the “one or more affixed engaging formations” – claim 39) are the same locations of the retaining element between its “free” position and its “locked” position.

Thus, the “first fixed locations” do not separately move independently from the locking pin between its “free” and “locked” position. In other words, the “affixed formations” essentially move in concert with the locking pin as an essentially undetached part (e.g., within acceptable or threshold tolerances, slight looseness, etc.) of the locking pin itself regardless of whether the locking pin is in its “free” position or its “locked” position. That is not to say that other movement is not possible such as movement in an acceptable orthogonal direction.

Similarly, the “second fixed locations” and the “fixed locations” do not separately move independently from the retaining element between its “free” position and its “locked” position. As such, the “affixed engaging formations” essentially move in concert with the retaining element as an essentially undetached part (e.g., within acceptable or threshold tolerances, slight looseness, etc.) of the retaining element itself regardless of whether the retaining element is in its “free” position or its “locked” position. Likewise, that is not to say that other movement is not possible such as movement in an acceptable orthogonal direction.

See, for example, Applicants’ non-limiting embodiments of Figures 5 and 9 (in US 2006/0078373 A1). The embodiment of Figure 5 depicts “affixed formations” 22 of locking pin 12. The embodiment of Figure 9 depicts “affixed engaging formations” (e.g., “spring” 19 and “ball” 20) of retaining element 15. In such embodiment, the “spring” 19 together with “ball” 20 remain “affixed” to the same “fixed” locations (e.g., at closed end(s) 17) of retaining element 15, irrespective of its “free” or “locked” position. However, orthogonal movement along the central axis of “spring” 19 (e.g., compression or expansion thereof) is still permissible even though the “fixed” locations (e.g., of the “spring” 19 together with “ball” 20 at closed end(s) 17) essentially move in concert with the “retaining element” 15. Other embodiments of “fixed” locations on the “locking pin” and/or the “retaining element” irrespective of whether they are in the “free” position or in the “locked” position are found elsewhere in Applicants’ published

specification (US 2006/0078373 A1).

New claim 45 depends from claim 44 and otherwise recites language similar to claim 2. See the Listing of the Claims section of this paper at page 9 hereof.

New claim 46 depends from claim 39. Claim 46 recites that the “affixed engaging formations” are “affixed” at a “corresponding set of “fixed locations” of the “retaining element”. (Emphasis added.) Note that claim 46 recites “fixed locations” rather than “second fixed locations” given that base claim 39 recites “one or more engaging formations” alone. (Emphasis added.)

Pursuant to claim 46, because the “affixed engaging formations” are “affixed” at the “corresponding set of fixed locations” of the retaining element, the “affixed engaging formations” (of claim 46) essentially move in concert with the retaining element as an essentially undetached part of the retaining element itself regardless of whether the retaining element is in its free position or in its locked position. See the Listing of the Claims section of this paper at page 9 hereof.

New claim 47 depends from claim 46 and further recites that the “affixed engaging formations each comprise a spring and a ball” which are “affixed” to the same corresponding “fixed” locations of the “retaining element” regardless of whether the “retaining element” is in its locked position or in its free position. (Emphasis added.) See the Listing of the Claims section of this paper at page 9 hereof.

Support for the Current Amendments and for the Introduction of the New Dependent Claims

(a) One or More

Support for the “one or more” with respect to the “affixed formations” and with respect to “affixed engaging formations” is found in Applicants’ specification – including at least at paragraph [0012] thereof – reproduced below:

[0012] Preferably, one of said components includes a first formation, and the pin has a second formation configured for engagement with the first formation when the pin is in the locked position. In a preferred embodiment, the pin is of generally cylindrical shape and the second formation includes a pair of spaced walls at least partly defining a circumferentially extending slot in the pin, the pin being configured such that the first formation enters the slot as the pin is rotated from the free position to the locked position.

In particular, attention is directed to the first sentence of paragraph [0012] which expressly recites the language:

Preferably, one of said components includes a first formation, and the pin has a second formation configured for engagement with the first formation when the pin is in the locked position.

Applicants’ published specification – US 2006/0078373 A1 – at page 1.

The foregoing sentence expressly describes “a [singular] second formation” of the locking “pin”. Also expressly described (in Applicants’ specification – US 2006/0078373 A1 – quoted above) is “a [singular] first formation” to engage with the “[singular] second formation” of the locking “pin”. See paragraph [0012] quoted above.

Further support for a singular “affixed formation” (e.g., “a second formation”) of the “rotatable locking pin” and a singular “affixed engaging formation” (e.g., “a first formation”) of the “retaining element” is provided in claim 5 of Applicants’ published application (US 2006/0078373 A1, page 6):

5. Apparatus according to claim 1 wherein one of said components includes a first formation, and the pin has a second formation configured for engagement with the first formation when the pin is in the locked position.

Also, support for a plurality of “affixed formations” (e.g., “a plurality of second formations”) and for a plurality of “affixed engaging formations” (e.g., “a plurality of first formations”) is found (in Applicants’ published specification US 2006/0078373 A1) in claim 25:

25. Apparatus according to claim 21 wherein the pin includes a plurality of second formations and the engagement element is castellated so as to define a plurality of first formations, each for engaging with a respective second formation when the pin is in the locked position.

More support for a “plurality” of “formations” (e.g., “a plurality of second formations”) and for a plurality of “engaging formations” (e.g., “a plurality of first formations”) is found in paragraph [0021] reproduced below:

[0021] In a preferred embodiment, the pin includes a plurality of second formations and the engagement element is castellated so as to define a plurality of first formations, each for engaging with a respective second formation when the pin is in the locked position.

See Applicants’ published specification – US 2006/0078373 A1 – page 2, paragraph [0021].

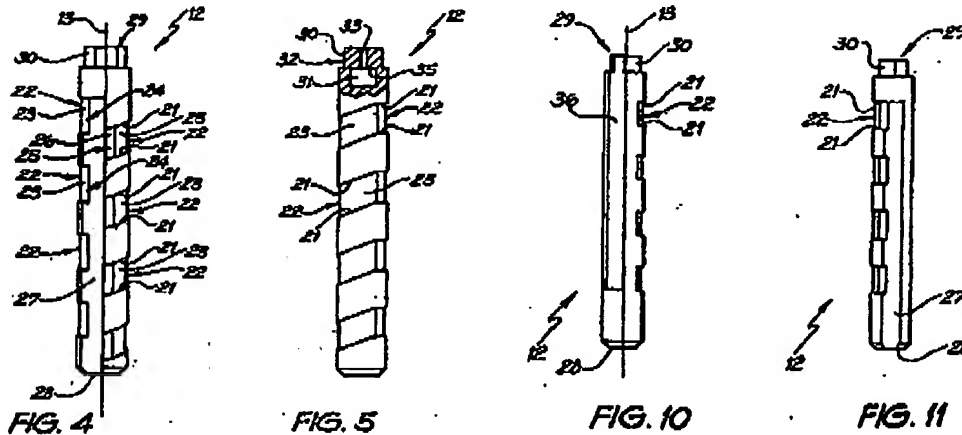
In sum, all the foregoing quoted language provides ample support both for (i) the “one or more” of “affixed formations” of the locking pin (e.g., second formation(s)), and (ii) the “one or more” of “affixed engaging formations” of the retaining element (e.g., first formation(s)). (Emphasis added.)

(b) Affixed Formation(s) and/or Affixed Engaging Formation(s)

Additionally, Applicants provide sufficient support for the term “affixed” as recited in the various pending claims. See for example, pending claims 1 and 39 reciting the term (iii) “one or more affixed formations”, and/or (iv) “one or more affixed engaging formations”. (Emphasis added.) Also see claims ultimately depending from claim 1 and claims ultimately depending from claim 39 in the Listing of the Claims section of this paper.

(1) Locking Pin – Affixed Formation(s)

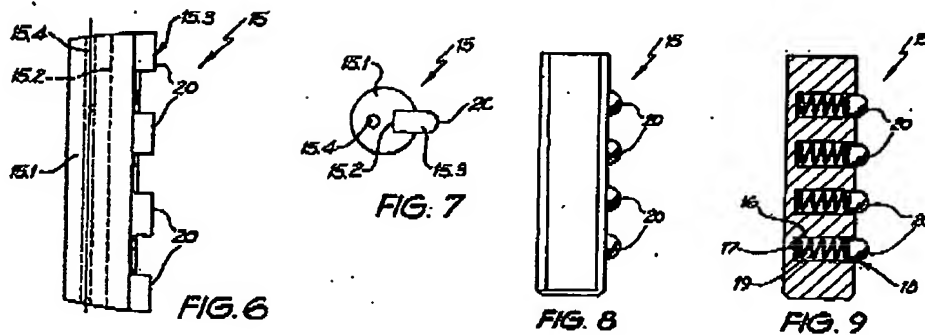
According to one or more non-limiting embodiments, the “affixed formations” of the locking pin are illustrated in Figures 4-5 and 10-11. Drawing Figure 4 illustrates the non-limiting embodiment of locking pin 12 having “affixed formations” 22 thereof. Drawing Figure 5 illustrates another non-limiting embodiment of locking pin 12 having “affixed formations” 22 thereof. Drawing Figure 10 illustrates another non-limiting embodiment of locking pin 12 having “affixed formations” 22 thereof. Drawing Figure 11 illustrates yet another non-limiting embodiment of locking pin 12 having “affixed formations” 22 thereof. For convenience, Applicants’ Figures 4-5 and 10-11 are reproduced below (Applicants’ published application – US 2006/0078373 A1):



Accordingly, Applicants’ above-noted non-limiting illustrations taken together with Applicants’ relevant description (and claims 5 and 25 quoted above) provide ample support for “one or more affixed formations” that are affixed to their associated “rotatable locking pin” as recited in various claims. (Emphasis added.)

(2) Retaining Element – Affixed Engaging Formation(s)

Similarly, pursuant to one or more of Applicants’ embodiments, support for the “one or more affixed engaging formations” of the “retaining element” is also provided. For example, see the non-limiting illustrations of drawing Figures 6-7. These drawings depict retaining element 15 and the “affixed engaging formations” 20 thereof. Drawing Figure 8 illustrates another non-limiting embodiment of retaining element 15 and the “affixed engaging formations” 20 thereof. Drawing Figure 9 illustrates another non-limiting embodiment of retaining element 15 and the “affixed engaging formations” 19 and 20 thereof (e.g., formed at holes 16 with one end of spring 19 abutting closed end 17 and the other end of spring 19 connected to ball 20). For convenience, Figures 6-9 are reproduced below (from Applicants’ published specification – US 2006/0078373 A1):



Accordingly, in view of Applicants' foregoing remarks, Applicants provide ample support for "one or more affixed engaging formations" associated with the "retaining element" as recited in the various pending claims. (Emphasis added.)

(c) Spring and Ball

Support for "each affixed engaging formation comprising a spring and a ball" is provided in Applicants' Figure 9 reproduced above in sub-section (b)(2) hereof. Accordingly, ample support for the language of new claim 47 is provided by Applicants.

Summary Regarding Ample Support

In view of Applicants' above-noted remarks – including those of sub-sections (a) – (c) hereof, all the claim amendments made (as noted in the Listing of the Claims section of this paper) and the new claims added are fully supported by Applicants' specification.

Accordingly, no new matter is introduced by Applicants' present claim amendments and/or by Applicants' introduction of new claims 44-47.

Allowed Claims 14-18, 21-26, and 29-30

Applicants thank the Examiner for indicating that claims 14-18, 21-26, and 29-30 are allowed in accordance with the Office Action (1) at the Office Action Summary page (see Disposition of Claims box marked as "(6) Claim(s) 14-18, 21-26, 29 and 30 is/are allowed" and (2) at page 8 under the heading "Allowable Subject Matter", sub-paragraph [3], reiterating that "Claims 14-15, 16-17, 18, 21-26, [and] 29-30 are allowed." (Emphasis added.) See Office Action at page 8, line 19 (the 4th line from the bottom).

Inadvertent Rejection of Claims 41-43

Claims 41-43 are rejected under 35 U.S.C. § 102(e) over Pippins (U.S. Pat. No. 6,757,995) as the sole ground of rejection as noted at pages 2-3 and 8 of the Office Action. Applicants respectfully traverse this rejection for the reasons noted below.

In particular, the rejection of claims 41, 42 and 43 appears to be due to an unrealized "book-keeping" type error. Specifically, claims 41-43 were previously amended to depend from presently allowed claim 26. See Applicants' prior filed February 12, 2009 Amendment. Claims 41-43 continue to

depend from allowed claim 26. See the Listing of the Claims section of this paper at page 8 hereof. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 41-43 under 35 U.S.C. § 102(e) over U.S. Pat. No. 6,757,995 (hereinafter, "Pippins" or "Pippins'").

Accordingly, Applicants also respectfully request an indication of the allowance of dependent claim 41-43 in accordance with the allowed status of base claim 26 from which claims 41-43 depend.

Description of Pippins' (U.S. Pat. No. 6,757,995) "Free-Floating" Detents, Design and Operation

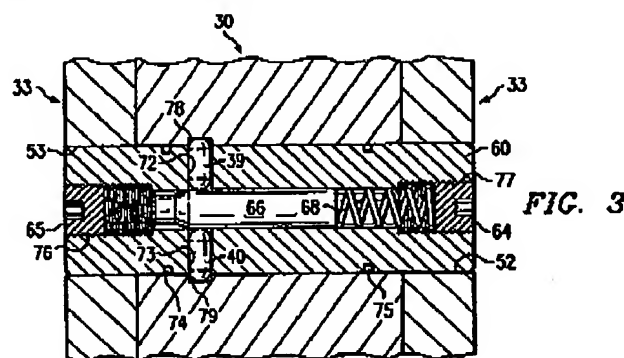
Before more specifically addressing the particular underlying basis for the current rejection(s) of record over Pippins, Applicants first provide their remarks concerning the Office's misunderstanding of the Pippins reference, as applied. Then, these remarks are incorporated and applied into Applicants' response traversing the rejections of record under 35 U.S.C. § 102(e) over Pippins (though having amended "attached" to "affixed" to provide clarity and/or to avoid unnecessary confusion/disagreement with respect to "attached").

Specifically, Applicants relevant remarks herein are applied in response to the rejections of record (1) because the Office Action (mailed March 9, 2009) misunderstands the term "attached", (2) because Applicants have amended the term "attached" to the term "affixed", (3) because Applicants wish to avoid a potential repetition of the foregoing misunderstanding (with respect to the term "attached") from being unnecessarily misapplied against the term "affixed", and/or (4) because Applicants wish to expedite prosecution and to secure allowance without further delay.

(d) **"Free-floating" Detents**

Thus, the Office's attention is directed to the Pippins reference, its "free-floating" detents, design and operations, respectively. In particular, Pippins' detents (39, 40) are "free-floating" (A) with respect to Pippins' cylindrical valve (66), (B) with respect to Pippins' retainer pin body (60) of retainer pin (38), and (C) also with respect to Pippins' reduced diameter neck (70), as illustrated and described in the applied Pippins reference.

Pippins' Figure 3 together with a description of the same is reproduced below, which depicts the requisite the "free-floating" Pippins' detents relating to the "free-floating" design and its operations:



(Emphasis added.)

(e) “Free-floating” Design and Operations

A description of the “free-floating” operations of the Pippins’ “free-floating” design is provided in the Pippins reference itself – reproduced below:

Valve 66 has a generally uniform thickness (diameter) over its entire length, except for a reduced diameter neck 70 disposed between opposing ends of valve 66. The diameter of valve 66 is configured such that detents 39 and 40 are maintained in an extended position, when detents 39 and 40 contact valve 66 at a location other than reduced diameter neck 70. Reduced diameter neck 70 is sized such that detents 39 and 40 may be at least partially received within the slot formed by reduced diameter neck 70, so that retainer pin 38 may be removed from adapter 30, in order to decouple adapter 30 and removable tooth 33.

See Pippins at col. 4, lines 32-43.

In particular, Pippins’ Figure 3 (i.e., detents (39, 40) extended into notched ends (78, 79) – Pippins’ extended/locked position) clearly depicts Pippins’ detents (39, 40) as NOT in contact with Pippins’ reduced diameter neck (70). Referring to Pippins’ Figure 3, Pippins expressly describes just exactly that situation by the statement:

The diameter of valve 66 is configured such that detents 39 and 40 are maintained in an extended position, when detents 39 and 40 contact valve 66 at a location other than reduced diameter neck 70.

(Pippins at col. 4, lines 35-39; underlining and italics emphasis added.) Accordingly, it is abundantly clear that when the Pippins’ detents (39, 40) ARE in the extended/locked position (into notched ends (78, 79)) as depicted in Pippins’ Figure 3, those Pippins’ detents (39, 40) are NOT in contact with Pippins’ reduced diameter neck portion (70).

Such is the very point Pippins expressly made by the phrase when “detents 39 and 40 are . . . in an extended position, [then] . . . detents 39 and 40 contact valve 66 at a location other than [the] reduced diameter neck 70.” (Underlining and italics emphasis added.) To once more reiterate, such Pippins’ statement and the corresponding depiction of Pippins’ locked position of Figures 3 together make clear that when Pippins’ detents (39, 40) ARE extended into notched ends (78, 79), the Pippins’ detents (39, 40) are NOT in contact with Pippins’ reduced diameter neck portion (70).

Moreover, regarding “free-floating” operations and design, Pippins also states:

Reduced diameter neck 70 is sized such that detents 39 and 40 may be at least partially received within the slot formed by reduced diameter neck 70, so that retainer pin 38 may be removed”

See Pippins at col. 4, lines 39-43. (Underlining emphasis added.) Such statement emphasizes that when Pippins’ valve (66) is displaced¹ so as to line up detents (39, 40) under/with reduced neck portion (70), the reduced diameter neck (70) is purposefully designed to receive/accept the Pippins’ “free-floating” detents (39, 40) out of notched ends (78, 79). By such “free-floating” design, the “free-floating” detents

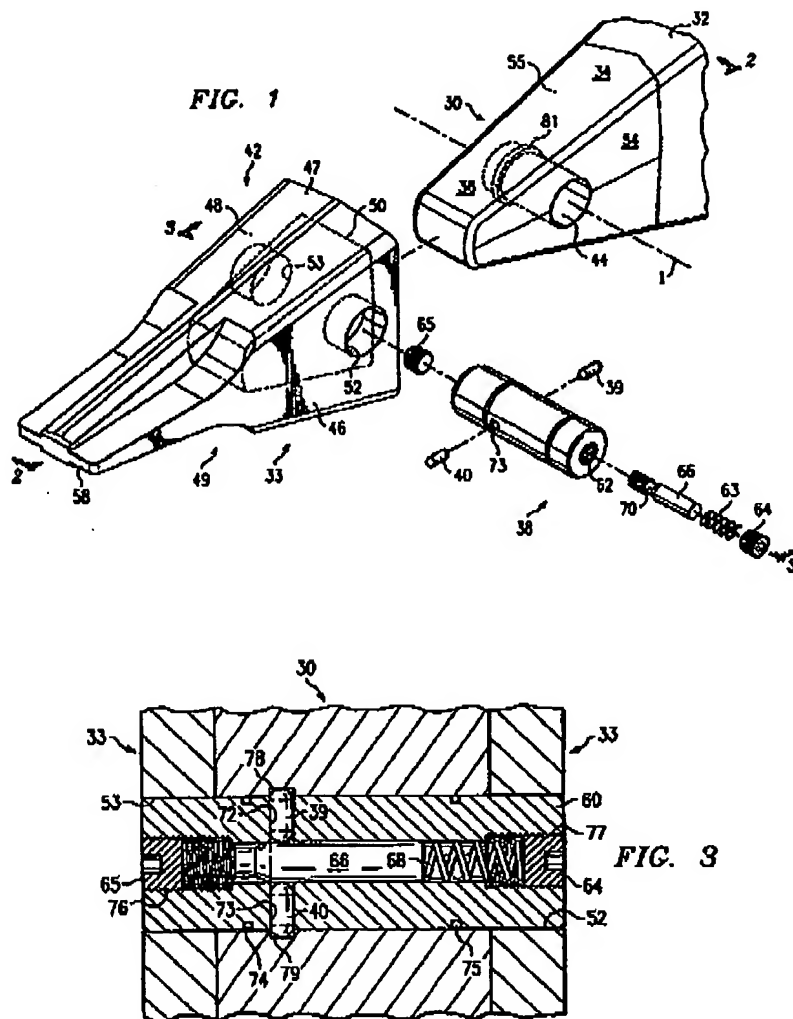
¹ e.g., to the RIGHT toward Pippins’ end cap (64) in the orientation of Pippins’ Figure 3 reproduced above.

(39, 40) can be "operated" to be withdrawn out of Pippins' notched ends (78, 79) to permit removal of Pippins' retainer pin (38) "in order to decouple adapter 30 and removable tooth 33"² from each other:

... Reduced diameter neck 70 is sized such that detents 39 and 40 may be at least partially received within the slot formed by reduced diameter neck 70, so that retainer pin 38 may be removed from adapter 30, in order to decouple adapter 30 and removable tooth 33.

Pippins at col. 4, lines 39-43. (Emphasis added.)

For reference, Pippins' adapter (30), removable tooth (33), retainer pin (38), retainer pin body (60), valve (66), and reduced diameter neck (70) are each shown in Pippins' Figures 1 and/or 3 reproduced herein:



Further referring to Pippins' Figure 3, in order for Pippins' detents (39, 40) to operate properly,

²

(Emphasis added.)

those detents (39, 40) HAVE to effectively be able to ride up Pippins' slanted shoulder³ in a "free-floating" and UNATTACHED (or UNAFFIXED) manner (D) so as to ultimately rest on the larger diameter neck portion of Pippins' valve (66), (E) so as to line up under/with Pippins' notched ends (78, 79), and (F) so as to extend into Pippins' notched ends (78, 79), respectively. Thereafter, the reverse operation (G) of receiving Pippins' detents (39, 40) back into Pippins' reduced diameter neck (70) in order to decouple Pippins' adapter (30) from Pippins' removal tooth (33) also requires Pippins' detents (39, 40) to be "free-floating" for the necessary operability of Pippins' operations and design.

Therefore, to perform operations (D)-(G) just described, it is a necessary requirement of Pippins' design that Pippins' detents (39, 40) must (at least) be "free-floating" with respect to Pippins' valve (66), with respect to Pippins' retainer pin body (60), and with respect to Pippins' reduced diameter neck (70).

If Pippins' detents (39, 40) were NOT "free-floating" as required, operations (D)-(G) would NOT be possible. In the end, had the Pippins' detents (39, 40) been "affixed" (or "attached" as asserted by the Office) instead of "free-floating", such critical operations (D)-(G) of the Pippins' design would be essentially unexecutable.

In sum, if Pippins' detents (39, 40) were "affixed" to the reduced neck portion (70) instead of "free-floating", then Pippins' detents (39, 40) (H) would remain "affixed" (or "attached") to Pippins' reduced diameter neck portion (70), (I) would remain unextendable into Pippins' notched ends (78, 79), and/or (J) would remain undisplaceable out of reduced diameter neck portion (70) over the slanted neck portion of valve (66). In effect, without the requisite "free-floating" operations and design of Pippins' "free-floating" detents (39, 40), the Pippins' device would at least fail to satisfy the requisite operations (H), (I) and/or (J) rendering the Pippins' design effectively inoperative. Failure of operations (D)-(G) would also render the Pippins' design essentially inoperative as well.

Accordingly, one cannot assert (or cannot continue to assert) that the Pippins' operations and design is effectively an "affixed" (or "attached") detent design – when the Pippins' "free-floating" detents, operations and design critically demand otherwise.

Given the foregoing remarks concerning the Pippins' detents, operations and design, one cannot logically characterize the Pippins' reference as disclosing a design other than a "free-floating" one. In summary, the Pippins' design is NOT an "affixed" (or "attached") design as the Office (in effect) appears to assert.

To avoid misunderstandings during further prosecution, it is critically necessary to appreciate the foregoing requisite nature of Pippins' "free-floating" detents (39, 40), "free-floating" operations and "free-floating" design. As further noted herein, Applicants trust that amending the rejected claims to recite "affixed" instead of "attached" cures any confusion in the Office's view so as to overcome the relevant rejections of record.

³ Slant adjacent to and to the right of Pippins' reduced diameter neck (70) of valve (66) depicted in Pippins' Figure 3.

Rejection of Claims 1-4, 7-13, 19-20 and 31-43 over Pippins

Claims 1-4, 7-13, 19-20 and 31-43 are rejected under 35 U.S.C. § 102(e) over Pippins for the reasons noted at pages 2-8 of the Office Action. Bearing in mind the above-noted Pippins' "free-floating" detents, operations and design required, Applicants respectfully traverse this rejection for the further reasons noted below.

(f) Claims 41-43

Applicants incorporate herein by reference their above-noted remarks under the sub-heading "**Inadvertent Rejection of Claims 41-43**" and apply the same here to the present rejection of claims 41-43 – without having to repeat the same.

Briefly however, it has been already noted above that claims 41-43 depend from allowed claim 26. Accordingly, the rejection of dependent claims 41-43 appears to be an inadvertent "book-keeping" type error because a dependent claim is allowable if the base claim is allowed – if as in this case – the only outstanding grounds for rejecting dependent claims 41-43 is reliance on the Pippins reference under 35 U.S.C. § 102(e).

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 41-43 under 35 U.S.C. § 102(e) over Pippins.

(g) Rejection of Claims 1-4, 7-13, 19-20 and 31-40

As already noted, claims 41-43 depend from allowed claim 26. Thus, the rejection of dependent claims 41-43 is set aside as moot. See sub-section (f) above. Thus, Applicants respectfully address the rejection of remaining claims 1-4, 7-13, 19-20 and 31-40 under 35 U.S.C. § 102(e) over Pippins.

With respect to the rejection of claims 1-4, 7-13, 19-20 and 31-40, only claims 1 and 39 are independent. Claims 2-4, 7-13, 19-20 and 31-38 ultimately depend from base claim 1. And, claim 40 depends from base claim 39.

(h) One or More Affixed Formations and/or One or More Affixed Engaging Formations

While Applicants traverse the rejection of these claims (claims 1-4, 7-13, 19-20 and 31-40) under 35 U.S.C. § 102(e) over Pippins for the reasons noted at pages 2-8 of the Office Action, Applicants also have a desire to expeditiously advance prosecution. Accordingly, Applicants have amended base claims 1 and 39 to recite "one or more affixed formations" or "one or more affixed engaging formations" or both as the case may be. See the Listing of the Claims section of this paper.

With respect to the rejection over Pippins, the Office Action asserts the following language in regards to claim 1 – marked as CLAUSES 1-4 for convenience:

[CLAUSE 1]

a rotatable locking pin (66) having attached formations (70) and a retaining element (38) having attached engaging formations (39, 40) are attached in the sense that they are fastened, secured or joined together with element 38 by being positioned within through holes 72 and 73) complementary to said formations (70) and each configured for being accommodated in aligned passages . . . [(Emphasis added.)]

[CLAUSE 2]

a locked position (fig. 3) in which the formations (70) of the locking pin (66) engage at least one of the engaging formations (39, 40) of the retaining element (38) so as to prevent withdrawal of the locking pin from the aligned passages and to prevent separation of the components, and [(Emphasis added.)]

[CLAUSE 3]

a free position (39, 40 into the formations 70, allowing removal of both 38 and 66) in which the pin is slidably removable from the aligned passages to permit separation of the components . . . [(Emphasis added.)]

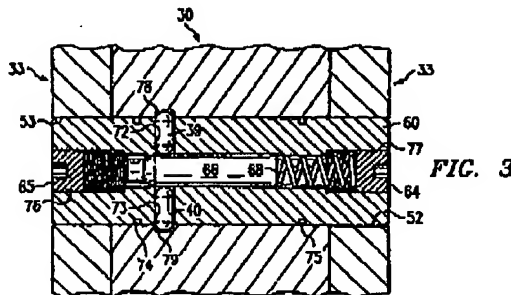
[CLAUSE 4]

wherein the pin (66) is configured so that said formations (70) interlock with the engaging formations (39, 40) of the retaining element (38) as the pin (66) is rotated . . . from the free position (39, 40 into the formations of 70, allowing the removal of both 38 and 66) to the locked position (fig. 3) to prevent separation of the first (30) and the second (33) components. [(Emphasis added.)]

See Office Action from page 3, line 8 to page 4, line 5.

From the foregoing quoted text of the latest Office Action, the Office further clearly acknowledges and understands Pippins' free position to be one where Pippins' detents (39, 40) are resting on reduced diameter neck portion (70) (and out of notched ends (78, 79). See the above-quoted language of **CLAUSE 3** – "the free position (39, 40 into formations 70, allowing removal of both 38 and 66) . . ." (Emphasis added.)

Likewise from foregoing quoted text, the Office clearly acknowledges and understands that Pippins' Figure 3:

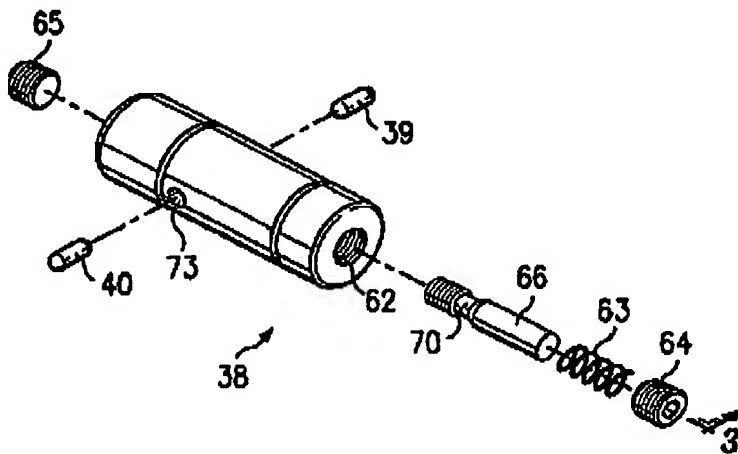


represents Pippins' locked position (i.e., "the locked position (fig. 3)") as quoted directly from CLAUSE 4 above. (Emphasis added.) With respect to the locked position as shown in Figure 3, Pippins' own description of that locked position (i.e., where "detents 39 and 40 contact valve 66 at a location other than reduced diameter neck 70"; Pippins at col. 4, lines 35-39) is consistent with the Office's CLAUSE 4 language (i.e., "a locked position (fig. 3)"). (Emphasis added.)

However, the Office's asserted language of CLAUSE 2 (i.e., "a locked position (fig. 3) in which formations (70) . . . engage . . . formations (39, 40)") is inconsistent with Pippins' own description of the locked position (i.e., where "detents 39 and 40 contact valve 66 at a location other than reduced diameter neck 70"; Pippins at col. 4, lines 35-39). (Emphasis added.) Accordingly, the relevant point is that Pippins' detents (39, 40) are NOT connected to the reduced diameter neck portion (70) in the locked position as erroneously asserted by the Office at CLAUSE 2:

a locked position (fig. 3) in which the formations (70) of the locking pin (66) engage at least one of the engaging formations (39, 40) of the retaining element (38)

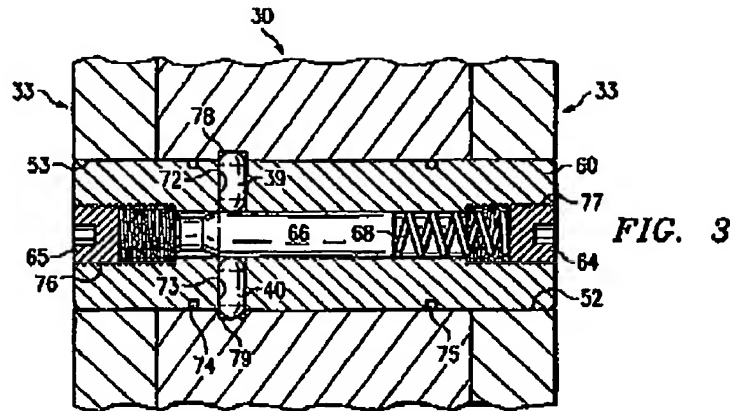
To the extent that the Office's confusion may have been caused by Pippins' reduced diameter neck portion (70) not being clearly labeled in Pippins' "locked position (fig. 3)"⁴, Applicants respectfully direct the Office to Pippins' Figure 1⁵ – where the Pippins' reduced diameter neck portion (70) is clearly depicted and labeled as indicated:



When Pippins' retaining pin (38), Pippins' retaining pin body (60) – having threaded end (62), Pippins' reduced diameter neck portion (70) and Pippins' cylindrical valve (66) are carefully examined in conjunction with Pippins' Figure 3 and its accompanying text:

⁴ See the Office's above-quoted CLAUSE 4 language.

⁵ As enlarged and reproduced herein.



Valve 66 has a generally uniform thickness (diameter) over its entire length, except for a reduced diameter neck 70 disposed between opposing ends of valve 66. The diameter of valve 66 is configured such that detents 39 and 40 are maintained in an extended position, when detents 39 and 40 contact valve 66 at a location other than reduced diameter neck 70. Reduced diameter neck 70 is sized such that detents 39 and 40 may be at least partially received within the slot formed by reduced diameter neck 70, so that retainer pin 38 may be removed from adapter 30, in order to decouple adapter 30 and removable tooth 33.

there is no question that Pippins' detents (39, 40) are not in contact with Pippins' reduced diameter neck portion (70) in Pippins' "locked position (fig. 3)"— a description directly contradicting the Office's assertion of **CLAUSE 2**. See Pippins at Figure 1, Figure 3 and Pippins' description at col. 4, lines 32-43 reproduced above. The Office has misunderstood the Pippins' "free-floating" detents, operations and design as evidenced by the Office's erroneous assertion of **CLAUSE 2** already described herein. Any assertion that detents (39, 40) are somehow "affixed" (or "attached") **CANNOT** stand because Pippins' relevant operations and design demand detents (39, 40) to be "free-floating" as already described. Simply put, Pippins' detents (39, 40) **ARE** "free-floating" and **CANNOT** be "affixed" (or "attached"). Thus, rejection of Applicants' claims reciting "affixed" (or "attached") under 35 U.S.C. § 102(e) over Pippins **CANNOT** stand.

With respect to rejected claims 39-40, the Office Action asserts/contends the language reproduced below as **CLAUSE 5** for convenience:

[CLAUSE 5]

rotating the pin (see col. 6, line 5) relative to the components, from the free position to a locked position (fig. 3) so that said engaging formations (39, 40) of said retaining element (38) interlock (via 39, 40) with said formation slot (70) defined by the attached pair of spaced walls to thereby prevent withdrawal of the pin from the aligned passages and hence prevent separation of the components.

(See Office Action at page 8, lines 3-7; emphasis added.)

Again, the above-quoted **CLAUSE 5** is just **WRONG**. Specifically, in the Pippins' "locked position (fig. 3)" – the Pippins' detents (39, 40) do **NOT** contact the Pippins' reduced diameter neck (70). To the extent necessary in support of the foregoing erroneous assertion of **CLAUSE 5**, Applicants' prior remarks above regarding the misunderstanding of the Pippins' "free-floating" detents, operations and design are incorporated herein by reference and applied here without having to repeat the same.

Having rebutted such critical and erroneous misstatement of **CLAUSE 5**⁶, the rejection of claims 39-40 under 35 U.S.C. § 102(e) over Pippins also **CANNOT** stand.

Given the basic misunderstanding of the Pippins' disclosure, Applicants respectfully submit that all of the rejected claims expressly reciting "affixed" (so amended to improve clarity and to expedite prosecution) are patentable over Pippins. The same also applies to new claims 44-47.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-4, 7-13, 19-20 and 31-43 under 35 U.S.C. § 102(e) over Pippins.

Accordingly, Applicants respectfully request allowance of all pending claims in addition to the already allowed claims 14-18, 21-26, and 29-30.

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Conclusion

In accordance with the foregoing, it is respectfully submitted that this application is in condition for allowance and a written indication of the same is earnestly solicited.

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⁶ **CLAUSE 5 erroneously asserting** that rotating the locking pin "to a locked position (fig. 3) [means] that said engaging formations (39, 40) of said retaining element (38) interlock (via 39, 40) with said formation slot (70)" – is directly contrary to the operation of the requisite Pippins' "free-floating" design – already rebutted herein. (Emphasis added.)

If any issues remain to be resolved, the Examiner is respectfully requested to contact the undersigned attorney so that any remaining issues (if any) may be promptly resolved to secure allowance of the subject application.

Respectfully submitted,

Date: July 9, 2009

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